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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/096,515	06/12/1998	YUJI INOUE	35.G2190	1905

5514 7590 11/18/2003

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NEW YORK, NY 10112

EXAMINER

DORSEY, DENNIS

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/096,515

Applicant(s)

INOUE ET AL.

Examiner

Dennis L Dorsey

Art Unit

3637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4,6-12 and 14-120 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4,6-12 and 14-120 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 22, 2003 has been entered.
2. A request for suspension of action under 37 CFR 1.103(b) or (c), including the fee was filed in this application after submission of the RCE. Since this application is eligible for the suspension of action and the fee set forth as been timely paid, the suspension was granted for a period of one month. Applicant's submission filed on September 22, 2003 has been entered

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 6-12, and 14-120 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoyama et al. in view of Frihart et al.

Itoyama et al. teaches all the limitations of the above claims except the specific composition of the jacket of the connector and electrical lead, the electrical connector contacting the backing material, and the specific composition of the backing material.

Itoyama teaches a solar cell (101), fixed to a metal substrate (107), fixed to a load bearing, water resistance and heat resistance backing material (104), electrically connected (113) between the backing material and building material, spacers (102), power converter (column 3, lines 12-15), and air flow apparatus (see figure 8).

The Applicant's disclosure of the prior art teaches that it is well known for one skill in the art to lengthen the electrical connector causing it to be in contact with the backing material to make connecting the panels easier (page 3, lines 18-25).

The Applicant's disclosure of the prior art further teaches that coating conductive leads is widely used (page 4, lines 7-8). The Applicant's disclosure of the prior art continues to and teaches that it is well known in the art to use a backing material of asphalt, vinyl chloride, polyurethane, or polystyrene (page 4, lines 8-11).

Frihart et al. teaches a conductive wire coating of a polyamide resin composition for insulation and protection of the wire providing highly desirable properties (see Abstract).

It would have been obvious for one skilled in the art at the time the invention was made to modify the wire coating of the Itoyama reference and select the material as taught by Frihart et al., since it is held to be within the skill of a worker in the art to select a known material as a matter of design choice to provide superior protection of the electrical lead.

It would have been obvious for one skilled in the art at the time the invention was made to pick and choose among the asphalt resins or any of the available materials readily available on the market to use as the backing material or roof board as taught by the Applicant's disclosure of the prior art, since it is held to be within the general skill of a worker in the art to select a suitable material well known in the art.

The Examiner takes the position that since one of the materials was found among the group of materials presented possible and since the materials appear to be equivalent according to the Applicant's disclosure (page 27, line 8-15) and since no criticality is given to one material over the other and since it is the Applicant's intention to cover various modifications and equivalent arrangements of the instant invention (page 33, line 7-9) the different of arrangements of different materials as set forth by the limitations of the newly added claims are functionally equivalent and thus rejected according to the above paragraphs.

Response to Amendment

5. Applicant's arguments filed December 12, 2002 have been fully considered but they are not persuasive. The Applicant contends that the 35 U.S.C. 103 rejection based on Itoyama '006 and Frihart is erroneous and improper because Applicant's specification cannot properly be relied on to establish equivalence, because the specification is neither an admission of prior art nor an admission of equivalency of the various claimed jacketing materials. However, the Examiner submits that the rejection is based on the obviousness as determined by the MPEP 2144.07, "Art Recognized Suitability for an Intended Purpose". Since Frihart teaches the composition of the material and teaches

using it as a jacket cover, it would be obvious for one skilled in the art that "The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination". The Examiner then concludes that the group of possible materials is no more than a list of available materials on the market that one skilled in the art can pick and choose from to meet known requirements. The Applicant's disclosure on page 27, line 8-15 (as well as in Table 1, pages 23-26) provides an expressed recognition of an obvious equivalent. In the rejection, the Examiner uses the aforementioned disclosure merely to refute an argument that such equivalency does not exist as permitted by the MPEP 2144.06 section entitled "Substituting Equivalents Known For The Same Purpose".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis L Dorsey whose telephone number is 703-306-9137. The examiner can normally be reached on Monday-Friday 9:00 am-5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 703-308-2486. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1020.

DLD 

LANNA MAI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

